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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/538,329	06/10/2005	Atsushi Nakajima	05368/HG	1547

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EXAMINER	
SHAH, MANISH S	

ART UNIT	PAPER NUMBER
2853	

MAIL DATE	DELIVERY MODE
11/02/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/538,329	NAKAJIMA, ATSUSHI	
	Examiner	Art Unit	
	Manish S. Shah	2853	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 August 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

1. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsushima (# JP 05-186725) in view of Yasuda et al. (# US 5213873).

Matsushima discloses an inkjet recording method for recording images on the base material using the UV-setting ink (see Abstract; [0020]-[0025]), wherein the ink composition includes colorant, UV polymeric compound, photo initiator and water ([0020]-[0025]), wherein the UV rays are applied to the jetted inks within a contact time in which the rate of ink transfer to the base material ([0024]-[0025]). They also disclose that the method further comprises the process of removing the water-based medium after hardening the ink by ultraviolet ray ([0024]).

Matsushima differs from the claim of the present invention is that the rate of the ink transfer to the base material is less than 20 ml/mm^2 and it more than 20 ml/mm^2 if the contact time of the ink on the base material is 2 seconds.

Yasuda et al. teaches that to get the water resistance high quality printed image, the ink image receiving layer had a water absorption of 25 ml/m^2 as determined by the Bristow method at an absorption time of 5 second (column: 12, line: 22-27).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink receiving layer of the Matsushima by the aforementioned teaching of Yasuda et al. in order to have a water resistance, high quality printed image.

2. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (# US 2003/0179270) in view of Yasuda et al. (# US 5213873).

Yamamoto et al. discloses an inkjet recording method for recording images on the base material using the UV-setting ink (see Abstract; [0009]-[0013]), wherein the ink composition includes colorant, UV polymeric compound, photo initiator and water ([0042]-[0044]), wherein the UV rays are applied to the jetted inks within a contact time in which the rate of ink transfer to the base material (figure: 6a; [0053]; [0076]). They also disclose that the method further comprises the process of removing the water-based medium after hardening the ink by ultraviolet ray ([0081]-[0082]).

Yamamoto et al. differs from the claim of the present invention is that the rate of the ink transfer to the base material is less than 20 ml/mm^2 and it more than 20 ml/mm^2 if the contact time of the ink on the base material is 2 seconds.

Yasuda et al. teaches that to get the water resistance high quality printed image, the ink image receiving layer had a water absorption of 25 ml/m^2 as determined by the Bristow method at an absorption time of 5 second (column: 12, line: 22-27).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink receiving layer of the Yamamoto et al. by the aforementioned teaching of Yasuda et al. in order to have a water resistance, high quality printed image.

3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsushima (# JP 05-186725) in view of Ohya et al. (# US 2003/0194539).

Matsushima discloses an inkjet recording method for recording images on the base material using the UV-setting ink (see Abstract; [0020]-[0025]), wherein the ink composition includes colorant, UV polymeric compound, photo initiator and water ([0020]-[0025]), wherein the UV rays are applied to the jetted inks within a contact time in which the rate of ink transfer to the base material ([0024]-[0025]). They also disclose that the method further comprises the process of removing the water-based medium after hardening the ink by ultraviolet ray ([0024]).

Matsushima differs from the claim of the present invention is that the rate of the ink transfer to the base material is less than 20 ml/mm^2 and it more than 20 ml/mm^2 if the contact time of the ink on the base material is 2 seconds.

Ohya et al. teaches that to get the bleed free, high quality printed image, the rate of the ink transfer to the base material is 10 to 30 ml/m^2 for a contact time of 40 milliseconds ([0036] & [0040]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink receiving layer of the Matsushima by the aforementioned teaching of Ohya et al. in order to have bleed free high quality printed image.

4. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamamoto et al. (# US 2003/0179270) in view of Ohya et al. (# US 2003/0194539).

Yamamoto et al. discloses an inkjet recording method for recording images on the base material using the UV-setting ink (see Abstract; [0009]-[0013]), wherein the ink composition includes colorant, UV polymeric compound, photo initiator and water ([0042]-[0044]), wherein the UV rays are applied to the jetted inks within a contact time in which the rate of ink transfer to the base material (figure: 6a; [0053]; [0076]). They also disclose that the method further comprises the process of removing the water-based medium after hardening the ink by ultraviolet ray ([0081]-[0082]).

Yamamoto et al. differs from the claim of the present invention is that the rate of the ink transfer to the base material is less than 20 ml/mm^2 and it more than 20 ml/mm^2 if the contact time of the ink on the base material is 2 seconds.

Ohya et al. teaches that to get the bleed free, high quality printed image, the rate of the ink transfer to the base material is 10 to 30 ml/m^2 for a contact time of 40 milliseconds ([0036] & [0040]).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the ink receiving layer of the Yamamoto et al. by the aforementioned teaching of Ohya et al. in order to have bleed free high quality printed image.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manish S. Shah whose telephone number is (571) 272-2152. The examiner can normally be reached on 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen D. Meier can be reached on (571) 272-2149. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Manish S. Shah
Primary Examiner
Art Unit 2853

MSS
10/26/07